Tivoli Data Protection for Informix Installation and User's Guide

Version 4 Release 1

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Note

Before using this information and the product it supports, read the general information under “Notices” on page v.

Third Edition (February 2001)

This edition applies to Version 4, Release 1 of Tivoli Data Protection for Informix, 5698-DPI, and to any subsequent releases until otherwise indicated in new editions or technical newsletters. Make sure you are using the correct edition for the level of the product.

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Contents

Notices v

Trademarks viii

Customer Support ix

About This Book xi

Chapter 1. Introduction 1

What Platforms are Supported? 1

Chapter 2. Installing TDP for Informix 3

AIX 32-bit 4

Requirements 4

Installation Procedure 4

Environment Variables 6

Uninstalling 7

AIX 64-bit 8

Requirements 8

Installation Procedure 8

Environment Variables 10

Uninstalling 11

HP-UX 32-bit 12

Requirements 12

Installation Procedure 12

Environment Variables 14

Uninstalling 15

HP-UX 64-bit 16

Requirements 16

Installation Procedure 16

Environment Variables 18
Uninstalling 19
Solaris 32-bit 20
Requirements 20
Installation Procedure 20
Environment Variables 22
Uninstalling 23
Installation Information – All Platforms 24
Editing the Client User Options File (dsm.opt) 24
Editing the Client System Options File (dsm.sys) 24
Assigning a Management Class for a Backup 25
Registering with the TSM Server 26
Initializing the Password 26

Chapter 3. Configuring 29

Step 1: Editing the Configuration File 29
For Informix IDS 7 29
Step 2: Ensuring ON-Bar Compatibility 30

Chapter 4. Problem Determination 31

Index 33

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Submit a Problem Management Record (PMR)	IBMSERV/IBMLINK at www2.ibmlink.ibm.com
Submit a Problem Management Record (PMR)	www.tivoli.com/support
E-mail	support@tivoli.com
Telephone (United States)	1-800-TIVOLI8 (1-800-848-6548)
Telephone (international)	Consult the Tivoli Web site (www.tivoli.com/support) for customer support telephone numbers

You can also review the Customer Support Handbook at our Web site at the following URL: www.tivoli.com/support/handbook/

When you contact Tivoli Customer Support, be prepared to provide identification information for your company so that support personnel can readily assist you. Company identification information may also be needed to access various online services available on the Web site.

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- the Customer Support Handbook (a guide to support services)
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- documentation for all Tivoli products, including Release Notes, Redbooks, and Whitepapers

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number, or order number of the desired document. Alternatively, you can provide the document title, version number, and date of publication. Translated documents are also available for some product releases.

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About This Book

This publication is for the system administrator, system programmer, or user who is responsible for installing, starting, or using Tivoli Data Protection for Informix. This publication assumes that you understand the general concepts of the operating systems, networking capabilities, internet capabilities, and databases for your enterprise. This publication provides information to help you install and configure Tivoli Data Protection for Informix.

The following related publications provide additional information.

Table 1. Related Publications

Title	Order Number
Tivoli Storage Manager Using the Application Program Interface	SH26-4123
Tivoli Storage Manager Installing the Clients	SH26-4119
Tivoli Storage Manager for UNIX Using the Backup-Archive Clients	SH26-4122
Tivoli Storage Manager Trace Facility Guide	SH26-4121

Refer to your Informix Server documentation for Informix-related information.

The following table indicates which Web site to access for additional information. When you enter the address, do not enter blank spaces in the address.

Table 2. Product Information Web Sites

Product	URL
Tivoli Storage Manager	`www.tivoli.com/support/storage_mgr/tivolimain.html`
Informix	`www.informix.com/informix/products/`
Open Group XBSA	`www.opengroup.org`

1

Introduction

Tivoli Data Protection for Informix (TDP for Informix) contains a library which implements the Open Group Backup Services application program interface (Open Group XBSA) functions for Informix. TDP for Informix uses the Tivoli Storage Manager (TSM) base application program interface (API) library. The TDP for Informix library allows you to back up and restore Informix server databases and logical logs. Backups are stored on the TSM server. TDP for Informix helps protect and manage Informix server data by allowing you to back up and restore data using the Informix **ON-Bar** utility.

TDP for Informix communicates with the Informix server using the **ON-Bar** utility for backup and restore services. **ON-Bar** provides:

- Parallel backup and restore
- Automatic backup of logical logs

ON-Bar uses Open Group XBSA to communicate with the TSM server.

What Platforms are Supported?

TDP for Informix supports the following platforms:

- AIX
- HP-UX
- Solaris

2

Installing TDP for Informix

This section provides information on the client environment that must exist before you install TDP for Informix, and information on installing and uninstalling TDP for Informix on UNIX systems.

For installation instructions, see the ***README.INF*** file for your platform and the following:

- For AIX 32-bit, see "Installation Procedure" on page 4.
- For AIX 64-bit, see "Installation Procedure" on page 8.
- For HP-UX 32-bit, see "Installation Procedure" on page 12.
- For HP-UX 64-bit, see "Installation Procedure" on page 16.
- For Solaris 32-bit, see "Installation Procedure" on page 20.

AIX 32-bit

Requirements

This section contains hardware and software requirements for the installation of TDP for Informix.

Hardware

The following hardware is required:

- RISC System/6000
- Disk space: 10 MB
- Memory: 32 MB

Software

Note: For the most current operating systems supported, see the ***README.INF*** file on the CD-ROM.

The following operating systems are supported:

- AIX 4.3.2 or 4.3.3

The following Informix servers are supported:

- Informix 7.3x (or higher) — Informix Dynamic Server
- Informix 9.2x (or higher) — Foundation 2000

Installation Procedure

Note: Before installing TDP for Informix, review the **README.INF** file for the most current installation information.

These instructions step you through the installation of TDP for Informix and assume that AIX 4.3 is the operating system.

The default installation paths for AIX 32-bit are as follows:

/usr/tivoli/tsm/client/informix/bin
TDP for Informix

/usr/tivoli/tsm/client/api/bin
TSM API

The following packages are available on the installation CD-ROM:

tivoli.tsm.client.informix.aix43.32bit
Installs TDP for Informix.

tivoli.tsm.client.api.aix43.32bit
Installs the TSM API.

The following steps show a sample installation using **smitty**:

1. Log in as the root user.
2. Insert the TDP for Informix CD-ROM into the CD-ROM reader.
3. From the AIX command line, type **smitty install** and press **Enter**.
4. Select **Install and Update Software** and press **Enter**.
5. Select **Install and Update from ALL Available Software** and press **Enter**.
6. At the **INPUT device/directory for software** prompt, press the **F4** key and select the CD-ROM device that contains the installation CD-ROM, and press **Enter**.
7. At the **SOFTWARE to Install** prompt, press the **F4** key. Select the TSM filesets you want to install and press **Enter**.
8. Select any options and press **Enter** to begin the installation.
9. Edit the client options files. See “Editing the Client User Options File (dsm.opt)” on page 24.
10. Register your workstation with the server. See “Registering with the TSM Server” on page 26.
11. Initialize the password. See “Initializing the Password” on page 26.

Environment Variables

Defining

The following environment variables are used to point to files that TDP for Informix uses:

DSMI_CONFIG

The fully qualified name for the client user option file (***dsm.opt***).

DSMI_DIR

Points to the TSM API installed path. This environment variable needs to be defined only if the TSM API is installed under a different path from the default path. The DSMI_DIR environment variable is also used to find the ***dsm.sys*** file.

DSMI_INF_DIR

Points to the TDP for Informix install path. This environment variable needs to be defined only if the TDP for Informix is installed under a different path from the default path.

DSMI_LOG

Points to the directory that contains the API error log file (***dsierror.log***).

For error log files, create a directory for the error logs to be created in, then let the DSMI_LOG environment variable point to that directory. The API error log file must have writeable rights by the user performing the backup.

Setting Up

The following example shows how to set up these environment variables for **AIX 32-bit**:

```
export DSMI_DIR=/usr/tivoli/tsm/client/api/bin
export DSMI_LOG=/home/user_a/logdir
export DSMI_INF_DIR=/usr/tivoli/tsm/client/informix/bin
export DSMI_CONFIG=/usr/tivoli/tsm/client/api/bin/dsm.opt
```

You can add these environment variable statements to the user's ***.profile*** file.

Uninstalling

To uninstall TDP for Informix, follow these steps:

1. Log in as the root user.
2. From the AIX command line, enter the following:

   ```
   smitty remove
   ```

   This prompt screen displays:

   ```
   SOFTWARE name                           [ ]
   PREVIEW only?                           yes
   REMOVE dependent software?              no
   EXTEND file systems if space needed?    no
   DETAILED output?                        no
   ```

3. Enter the software name, and press **Enter**.

   This prompt screen displays:

   ```
     ARE YOU SURE?
   Continuing may delete information you may want to keep.
   This is your last chance to stop before continuing.

     Press Enter to continue.
     Press Cancel to return to the application.
   ```

4. Either continue or cancel the operation.

   If you continue, the command status window will preview the results of the deinstall process.

AIX 64-bit

Requirements

This section contains hardware and software requirements for the installation of TDP for Informix.

Hardware

The following hardware is required:

- RISC System/6000
- Disk space: 10 MB
- Memory: 32 MB

Software

Note: For the most current operating systems supported, see the ***README.INF*** file on the CD-ROM.

The following operating systems are supported:

- AIX 4.3.3

The following Informix servers are supported:

- Informix 7.31 FC7 (or higher) — Informix Dynamic Server

Installation Procedure

Note: Before installing TDP for Informix, review the ***README.INF*** file for the most current installation information.

These instructions step you through the installation of TDP for Informix and assume that AIX 4.3 is the operating system.

The default installation paths for AIX 64-bit are as follows:

/usr/tivoli/tsm/client/informix/bin64
TDP for Informix

/usr/tivoli/tsm/client/api/bin64
TSM API

The following packages are available on the installation CD-ROM:

tivoli.tsm.client.informix.aix43.64bit
Installs TDP for Informix.

tivoli.tsm.client.api.aix43.64bit
Installs the TSM API.

The following steps show a sample installation using **smitty**:

1. Log in as the root user.
2. Insert the TDP for Informix CD-ROM into the CD-ROM reader.
3. From the AIX command line, type **smitty install** and press **Enter**.
4. Select **Install and Update Software** and press **Enter**.
5. Select **Install and Update from ALL Available Software** and press **Enter**.
6. At the **INPUT device/directory for software** prompt, press the **F4** key and select the CD-ROM device that contains the installation CD-ROM, and press **Enter**.
7. At the **SOFTWARE to Install** prompt, press the **F4** key. Select the TSM filesets you want to install and press **Enter**.
8. Select any options and press **Enter** to begin the installation.
9. Edit the client options files. See “Editing the Client User Options File (dsm.opt)” on page 24.
10. Register your workstation with the server. See “Registering with the TSM Server” on page 26.
11. Initialize the password. See “Initializing the Password” on page 26.

Environment Variables

Defining

The following environment variables are used to point to files that TDP for Informix uses:

DSMI_CONFIG

The fully qualified name for the client user option file (***dsm.opt***).

DSMI_DIR

Points to the TSM API installed path. This environment variable needs to be defined only if the TSM API is installed under a different path from the default path. The DSMI_DIR environment variable is also used to find the ***dsm.sys*** file.

DSMI_INF_DIR

Points to the TDP for Informix install path. This environment variable needs to be defined only if the TDP for Informix is installed under a different path from the default path.

DSMI_LOG

Points to the directory that contains the API error log file (***dsierror.log***).

For error log files, create a directory for the error logs to be created in, then let the DSMI_LOG environment variable point to that directory. The API error log file must have writeable rights by the user performing the backup.

Setting Up

The following example shows how to set up these environment variables for **AIX 64-bit**:

```
export DSMI_DIR=/usr/tivoli/tsm/client/api/bin64
export DSMI_LOG=/home/user_a/logdir
export DSMI_INF_DIR=/usr/tivoli/tsm/client/informix/bin64
export DSMI_CONFIG=/usr/tivoli/tsm/client/api/bin64/dsm.opt
```

You can add these environment variable statements to the user's ***.profile*** file.

Uninstalling

To uninstall TDP for Informix, follow these steps:

1. Log in as the root user.
2. From the AIX command line, enter the following:

   ```
   smitty remove
   ```

   This prompt screen displays:

   ```
   SOFTWARE name                           [ ]
   PREVIEW only?                           yes
   REMOVE dependent software?              no
   EXTEND file systems if space needed?    no
   DETAILED output?                        no
   ```

3. Enter the software name, and press **Enter**.

   This prompt screen displays:

   ```
     ARE YOU SURE?
   Continuing may delete information you may want to keep.
   This is your last chance to stop before continuing.

     Press Enter to continue.
     Press Cancel to return to the application.
   ```

4. Either continue or cancel the operation.

   If you continue, the command status window will preview the results of the deinstall process.

HP-UX 32-bit

Requirements

This section contains hardware and software requirements for the installation of TDP for Informix.

Hardware

The following hardware is required:

- An HP 9000 Series 700 or 800 workstation
- Disk space: 6 MB
- Memory: 96 MB

Software

Note: For the most current operating systems supported, see the ***README.INF*** file on the CD-ROM.

The following operating systems are supported:

- HP-UX 11.0

The following Informix servers are supported:

- Informix 9.21 HC4 (or higher) — Foundation 2000

Installation Procedure

Note: Before installing TDP for Informix, review the ***README.INF*** file for the most current installation information.

The default installation paths for HP-UX 32-bit are as follows:

/opt/tivoli/tsm/client/informix/bin
TDP for Informix

/opt/tivoli/tsm/client/api/bin
TSM API

The following packages are available on the installation CD-ROM:

TDPinf
Installs TDP for Informix.

TIVsm
Installs the TSM API.

TDP for Informix uses the **swinstall** program to install.

Follow the steps below to install the TSM API and TDP for Informix.

1. Log in as the root user.
2. Create a directory for mounting the CD-ROM. Set the appropriate permission to the directory:
   ```
   # mkdir /cdrom
   # chmod 755 /cdrom
   ```
3. Insert the TDP for Informix CD-ROM into the CD-ROM drive and mount the CD-ROM:
   ```
   # mount -r -F hsfs <device_name> /cdrom
   ```
   Enter your *device_name* for the CD-ROM in this command. An example of *device_name* is:
   ```
   /dev/dsk/c1t2d0
   ```
4. Issue the following command to install the TSM API:
   ```
   swinstall -v -s /cdrom/tsmcli/hp/TIVsm
   ```
5. Issue the following command to install the TDP for Informix:
   ```
   swinstall -v -s /cdrom/tsmcli/hp/TDPinf
   ```
6. Edit the client options files. See “Editing the Client User Options File (dsm.opt)” on page 24.
7. Register your workstation with the server. See “Registering with the TSM Server” on page 26.
8. Initialize the password. See “Initializing the Password” on page 26.

Environment Variables

Defining

The following environment variables are used to point to files that TDP for Informix uses:

DSMI_CONFIG

The fully qualified name for the client user option file (***dsm.opt***).

DSMI_DIR

Points to the TSM API installed path. This environment variable needs to be defined only if the TSM API is installed under a different path from the default path. The DSMI_DIR environment variable is also used to find the ***dsm.sys*** file.

DSMI_INF_DIR

Points to the TDP for Informix install path. This environment variable needs to be defined only if the TDP for Informix is installed under a different path from the default path.

DSMI_LOG

Points to the directory that contains the API error log file (***dsierror.log***).

For error log files, create a directory for the error logs to be created in, then let the DSMI_LOG environment variable point to that directory. The API error log file must have writeable rights by the user performing the backup.

Setting Up

The following example shows how to set up these environment variables for **HP-UX 32-bit**:

```
export DSMI_DIR=/opt/tivoli/tsm/client/api/bin
export DSMI_LOG=/home/user_a/logdir
export DSMI_INF_DIR=/opt/tivoli/tsm/client/informix/bin
export DSMI_CONFIG=/opt/tivoli/tsm/client/api/bin/dsm.opt
```

You can add these environment variable statements to the user's ***.profile*** file.

Uninstalling

Perform these steps to uninstall TDP for Informix:

1. Log in as the root user.
2. Issue these commands:

```
swremove -v TDPinf
swremove -v TIVsm
```

HP-UX 64-bit

Requirements

This section contains hardware and software requirements for the installation of TDP for Informix.

Hardware

The following hardware is required:

- An HP 9000 Series 700 or 800 workstation
- Disk space: 6 MB
- Memory: 96 MB

Software

Note: For the most current operating systems supported, see the ***README.INF*** file on the CD-ROM.

The following operating systems are supported:

- HP-UX 11.0

The following Informix servers are supported:

- Informix 7.31 FC7 (or higher) — Informix Dynamic Server

Installation Procedure

Note: Before installing TDP for Informix, review the ***README.INF*** file for the most current installation information.

The default installation paths for HP-UX 64-bit are as follows:

/opt/tivoli/tsm/client/informix/bin64
TDP for Informix

/opt/tivoli/tsm/client/api/bin64
TSM API

The following packages are available on the installation CD-ROM:

TDPinf64
Installs TDP for Informix.

TIVsm64
Installs the TSM API.

TDP for Informix uses the **swinstall** program to install.

Follow the steps below to install the TSM API and TDP for Informix.

1. Log in as the root user.
2. Create a directory for mounting the CD-ROM. Set the appropriate permission to the directory:

   ```
   # mkdir /cdrom
   # chmod 755 /cdrom
   ```

3. Insert the TDP for Informix CD-ROM into the CD-ROM drive and mount the CD-ROM:

   ```
   # mount -r -F hsfs <device_name> /cdrom
   ```

   Enter your *device_name* for the CD-ROM in this command. An example of *device_name* is:

   ```
   /dev/dsk/clt2d0
   ```

4. Issue the following command to install the TSM API:

   ```
   swinstall -v -s /cdrom/tsmcli/hp/TIVsm64
   ```

5. Issue the following command to install the TDP for Informix:

   ```
   swinstall -v -s /cdrom/tsmcli/hp/TDPinf64
   ```

6. Edit the client options files. See “Editing the Client User Options File (dsm.opt)” on page 24.
7. Register your workstation with the server. See “Registering with the TSM Server” on page 26.
8. Initialize the password. See “Initializing the Password” on page 26.

Environment Variables

Defining

The following environment variables are used to point to files that TDP for Informix uses:

DSMI_CONFIG

The fully qualified name for the client user option file (***dsm.opt***).

DSMI_DIR

Points to the TSM API installed path. This environment variable needs to be defined only if the TSM API is installed under a different path from the default path. The DSMI_DIR environment variable is also used to find the ***dsm.sys*** file.

DSMI_INF_DIR

Points to the TDP for Informix install path. This environment variable needs to be defined only if the TDP for Informix is installed under a different path from the default path.

DSMI_LOG

Points to the directory that contains the API error log file (***dsierror.log***).

For error log files, create a directory for the error logs to be created in, then let the DSMI_LOG environment variable point to that directory. The API error log file must have writeable rights by the user performing the backup.

Setting Up

The following example shows how to set up these environment variables for **HP-UX 64-bit**:

```
export DSMI_DIR=/opt/tivoli/tsm/client/api/bin64
export DSMI_LOG=/home/user_a/logdir
export DSMI_INF_DIR=/opt/tivoli/tsm/client/informix/bin64
export DSMI_CONFIG=/opt/tivoli/tsm/client/api/bin64/dsm.opt
```

You can add these environment variable statements to the user's ***.profile*** file.

Uninstalling

Perform these steps to uninstall TDP for Informix:

1. Log in as the root user.
2. Issue these commands:

```
swremove -v TDPinf64
swremove -v TIVsm64
```

Solaris 32-bit

Requirements

This section contains hardware and software requirements for the installation of TDP for Informix.

Hardware

The following hardware is required:

- A SPARCstation or compatible workstation
- Disk space: 10 MB
- Memory: 32 MB

Software

Note: For the most current operating systems supported, see the ***README.INF*** file on the CD-ROM.

The following operating systems are supported:

- Solaris 2.6 or Solaris 7

The following Informix servers are supported:

- Informix 7.3x (or higher) — Informix Dynamic Server
- Informix 9.2x (or higher) — Foundation 2000

Installation Procedure

Note: Before installing TDP for Informix, review the ***README.INF*** file for the most current installation information.

The default installation paths for Solaris 32-bit are as follows:

/opt/tivoli/tsm/client/informix/bin
TDP for Informix

/opt/tivoli/tsm/client/api/bin
TSM API

The following packages are available on the installation CD-ROM:

TDPinfmx
Installs TDP for Informix.

TIVsmCapi
Installs the TSM API.

Follow these steps to install the TSM API and TDP for Informix. Replace the word **cdrom** with the file system of the CD-ROM drive on your system.

1. Log in as the root user.
2. Insert the CD-ROM containing the TDP for Informix package into the CD-ROM drive and mount it to **/cdrom**.
3. Enter the following command to install the TSM API:
   ```
   pkgadd -d /cdrom/tsmcli/solaris TIVsmCapi (this is uncompressed)
   ```
4. Enter the following command to install TDP for Informix:
   ```
   pkgadd -d /cdrom/tsmcli/solaris TDPinfmx (this is uncompressed)
   ```
5. Edit the client options files. See “Editing the Client User Options File (dsm.opt)” on page 24.
6. Register your workstation with the server. See “Registering with the TSM Server” on page 26.
7. Initialize the password. See“Initializing the Password” on page 26.

Environment Variables

Defining

The following environment variables are used to point to files that TDP for Informix uses:

DSMI_CONFIG

The fully qualified name for the client user option file (***dsm.opt***).

DSMI_DIR

Points to the TSM API installed path. This environment variable needs to be defined only if the TSM API is installed under a different path from the default path. The DSMI_DIR environment variable is also used to find the ***dsm.sys*** file.

DSMI_INF_DIR

Points to the TDP for Informix install path. This environment variable needs to be defined only if the TDP for Informix is installed under a different path from the default path.

DSMI_LOG

Points to the directory that contains the API error log file (***dsierror.log***).

For error log files, create a directory for the error logs to be created in, then let the DSMI_LOG environment variable point to that directory. The API error log file must have writeable rights by the user performing the backup.

Setting Up

The following example shows how to set up these environment variables for **Solaris 32-bit**:

```
export DSMI_DIR=/opt/tivoli/tsm/client/api/bin
export DSMI_LOG=/home/user_a/logdir
export DSMI_INF_DIR=/opt/tivoli/tsm/client/informix/bin
export DSMI_CONFIG=/opt/tivoli/tsm/client/api/bin/dsm.opt
```

You can add these environment variable statements to the user's ***.profile*** file.

Uninstalling

To uninstall TDP for Informix, follow these steps:

1. Log in as the root user.
2. Issue these commands:

```
pkgrm TDPinfmx
pkgrm TIVsmCapi
```

Installation Information – All Platforms

TDP for Informix communicates with the TSM server using the TSM API. By default, TDP for Informix uses the client user options file (***dsm.opt***) and client system options file (***dsm.sys***) located in the TSM API installation directory.

- Specify the TSM server to use in the client user options file, ***dsm.opt***.
- Identify the TSM server name, communication method, and server options in the client system options file, ***dsm.sys***.

The sample options files distributed with the TSM API (***dsm.opt.smp*** and ***dsm.sys.smp***) can be used to help you get started quickly. It is recommended the root user perform necessary edits to the ***dsm.opt*** file and ***dsm.sys*** file.

See *TSM Installing the Clients* and *TSM Trace Facility Guide* for information regarding options you can specify in these files.

Editing the Client User Options File (dsm.opt)

The ***dsm.opt*** file must refer to the correct TSM server stanza in the ***dsm.sys*** file.

- Use the SERVERNAME option in the ***dsm.opt*** file to identify which server (listed in the ***dsm.sys*** file) TDP for Informix will contact for services.
- Use the TRACEFILE option to send trace output information to a designated file.
- Use the TRACEFLAG option to set specific trace flags.

Editing the Client System Options File (dsm.sys)

The ***dsm.sys*** file must refer to the correct TSM server address and communication method.

- Use the SERVERNAME option in the ***dsm.sys*** file to perform the following:
  - Specify the name you want to use to identify a server
  - Create a stanza that contains options for that server

Note: The SERVERNAME option in the ***dsm.opt*** and ***dsm.sys*** files define server stanza names only. The TCPSERVERADDRESS option controls which server is actually contacted.

The following TSM options are the most important to be set in the client system options file, ***dsm.sys***:

- SERVERNAME option (to identify the TSM server stanza called by ***dsm.opt***)
- COMMMETHOD option (to identify the communication method)
- TCPSERVERADDRESS option (to identify the TSM server)
- PASSWORDACCESS option (specify GENERATE to store the TSM password)

You can setup multiple server stanzas in the ***dsm.sys*** file. See *TSM Installing the Clients* for information regarding multiple server stanzas.

Assigning a Management Class for a Backup

When you back up a database, the default management class for your node is used. You can override the default value with a different value that is specified in the INCLUDE option. This option is placed in the ***include-exclude*** options file. The file name of the ***include-exclude*** options file is placed in the client system's options file. For more information, see *TSM Installing the Clients*

There are object naming conventions for the **ON-Bar** files. Use the following naming conventions for

- a database backup:

  `/dbservername/dbservername/dbspacename/level`

- a log backup:

  `/dbservername/dbservername/server_number/unique_logid`

For a database backup, an example of the INCLUDE statement is as follows:

```
Include /dbserverA/dbserverA/dbspaceA/*  InformixDbMgmt
```

For a logical log back up, an example of the INCLUDE statement is as follows:

```
Include /dbserverA/dbserverA/55/*        InformixLogMgmt
```

where the number 55 is the value of the SERVERNUM parameter in the ***onconfig*** file.

Registering with the TSM Server

Before backing up to and recovering from a TSM server, you must have a TSM registered node name and a password. The process of setting up a node name and password is called *registration*. Once the TDP for Informix node is registered with a TSM server, you can begin using the TDP for Informix to back up and restore your Informix databases and logical logs.

If your workstation has a node name assigned to the TSM backup-archive client, we recommend that you have a different node name for TDP for Informix.

For information about performing the registration process, see *TSM Installing the Clients.*

Initializing the Password

Note: The root user **must** run the **tdpipswd** program before using TDP for Informix.

Perform these steps to initialize the password:

1. Start the **tdpipswd** program. This program is located in the directory pointed to by the DSMI_INF_DIR environment variable. This program sets up a connection with the server stanza that you specified in the ***dsm.opt*** file. This message displays:

```
Tivoli Data Protection for Informix Backup
Password file Initialization program
>>this must be run by the ROOT user if updating the value<<
```

2. You can keep your current password or enter a new password.

a. To keep your current password, press **Enter** without a value when you see the **Enter your new password** prompt. This message displays:

```
Your password has been accepted.
```

b. To enter a new password, enter the new password when you see the **Enter your new password** prompt. This message displays:

```
Your password has been accepted.
```

3

Configuring

This section takes you through the setup of TDP for Informix. Some steps require that you, as the Informix database administrator, exchange information with the TSM administrator.

The steps are:

- Step 1 — Edit the Informix configuration file (***onconfig***)
- Step 2 — Ensure **ON-Bar** compatibility

Step 1: Editing the Configuration File

After the Informix **ON-Bar** utility is installed, you need to edit the Informix configuration file. A sample configuration file is shipped on the Informix CD-ROM named ***onconfig.std***. The Informix file (***onconfig.std***) is located in directory **$INFORMIXDIR/etc**. Copy ***onconfig.std*** to ***onconfig***. Edit the ***onconfig*** file.

For Informix IDS 7

This step is required only if you are using Informix IDS 7.

The ***onconfig*** file contains a parameter **BAR_BSALIB_PATH** which sets the value for the TDP for Informix library. The parameter should be set as follows:

For **AIX 32-bit**:

```
BAR_BSALIB_PATH=/usr/tivoli/tsm/client/informix/bin/bsashr10.o
```

For **AIX 64-bit**:

```
BAR_BSALIB_PATH=/usr/tivoli/tsm/client/informix/bin64/bsashr10.o
```

For **HP-UX 32-bit**:

```
BAR_BSALIB_PATH=/opt/tivoli/tsm/client/informix/bin/libTDPinf.sl
```

For **HP-UX 64-bit**:

```
BAR_BSALIB_PATH=/opt/tivoli/tsm/client/informix/bin64/libTDPinf64.sl
```

For **Solaris 32-bit**:

```
BAR_BSALIB_PATH=/opt/tivoli/tsm/client/informix/bin/libTDPinf.so
```

Step 2: Ensuring ON-Bar Compatibility

After installing **ON-Bar**, make sure it is compatible with the current version of the TSM client. Copy ***sm_versions.std*** to ***sm_versions***. Edit the ***sm_versions*** file before running **oninit**. Follow these steps:

1. Edit the file **$INFORMIXDIR/etc/sm_versions**.
2. Create a line for the current TSM level:

   ```
   1|4.1.0|adsm|4
   ```

   The fields in this line are:

   1 Always use 1.

   4.1.0 TSM API version.release.level

   adsm The storage management application name that ON-Bar recognizes.

   4 TSM version

   If the current TSM version is not in this table, you will get an error about an incompatible version.

4

Problem Determination

ON-Bar might report an **unspecified XBSA error 96**. This indicates that a TSM error occurred that could not be explained with the currently defined XBSA return codes. The explanation for the error will be in the ***dsierror.log*** file, which is specified by the DSMI_LOG environment variable.

If there are any license violations, these will be documented in the ***tsmlic.log*** file.

The following two Informix log files can be used to assist in problem determination:

The target file specified by the BAR_ACT_LOG configuration parameter in the ***onconfig*** file.

By default, this target file name is ***bar_act.log***.

The target file specified by the MSGPATH configuration parameter in the ***onconfig*** file.

By default, this target file name is ***online.log***.

Refer to your Informix documentation for important information relating to problem determination assistance.

For other TSM API return codes, see *TSM Using the Application Program Interface*.

Index

A

AIX 32-bit 4
- environment variables 6
- hardware requirements 4
- installation directory 4
- installation procedure 4
- operating systems 4
- package 4
- software requirements 4
- uninstalling 7

AIX 64-bit
- environment variables 10
- hardware requirements 8
- installation directory 8
- installation procedure 8
- operating systems 8
- package 8
- software requirements 8
- uninstalling 11

B

bar_act.log 31
BAR_BSALIB_PATH parameter
- Informix IDS 7
  - AIX 32-bit 29
  - AIX 64-bit 30
  - HP-UX 32-bit 30
  - HP-UX 64-bit 30
  - Solaris 32-bit 30

C

COMMMETHOD option 24
configuring 29

D

dsierror.log 6, 10, 14, 18, 22, 31
dsm.opt 6, 10, 14, 18, 22, 24, 26
dsm.opt.smp 24
dsm.sys 6, 10, 14, 18, 22, 24
dsm.sys.smp 24
DSMI_CONFIG
- AIX 32-bit 6
- AIX 64-bit 10
- HP-UX 32-bit 14
- HP-UX 64-bit 18
- Solaris 32-bit 22

DSMI_DIR
- AIX 32-bit 6
- AIX 64-bit 10
- HP-UX 32-bit 14
- HP-UX 64-bit 18
- Solaris 32-bit 22

DSMI_INF_DIR
- AIX 32-bit 6
- AIX 64-bit 10
- HP-UX 32-bit 14
- HP-UX 64-bit 18
- Solaris 32-bit 22

DSMI_LOG
- AIX 32-bit 6
- AIX 64-bit 10
- HP-UX 32-bit 14
- HP-UX 64-bit 18
- Solaris 32-bit 22

E

environment variables
- defining
  - AIX 32-bit 6
  - AIX 64-bit 10

environment variables *(continued)*
HP-UX 32-bit 14
HP-UX 64-bit 18
Solaris 32-bit 22
setting up
AIX 32-bit 6
AIX 64-bit 10
HP-UX 32-bit 14
HP-UX 64-bit 18
Solaris 32-bit 22
errors 31

F

files
.profile
AIX 32-bit 6
AIX 64-bit 10
HP-UX 32-bit 14
HP-UX 64-bit 18
Solaris 32-bit 22
bar_act.log 31
dsierror.log 6, 10, 14, 18, 22, 31
dsm.opt 6, 10, 14, 18, 22, 24, 26
dsm.opt.smp 24
dsm.sys 6, 10, 14, 18, 22, 24
dsm.sys.smp 24
include-exclude 25
onconfig 26, 29, 31
onconfig.std 29
online.log 31
README.INF 3, 4, 8, 12, 16, 20
sm_versions 30
sm_versions.std 30
tsmlic.log 31

H

hardware requirements
AIX 32-bit 4
AIX 64-bit 8
hardware requirements *(continued)*
HP-UX 32-bit 12
HP-UX 64-bit 16
Solaris 32-bit 20
HP-UX 32-bit 12
environment variables 14
hardware requirements 12
installation directory 12
installation procedure 12
operating systems 12
package 12
software requirements 12
uninstalling 15
HP-UX 64-bit 16
environment variables 18
hardware requirements 16
installation directory 16
installation procedure 16
operating systems 16
package 16
software requirements 16
uninstalling 19

I

include-exclude 25
INCLUDE option 25
Informix IDS 7
editing onconfig 29
Informix servers
AIX 32-bit 4
AIX 64-bit 8
HP-UX 32-bit 12
HP-UX 64-bit 16
Solaris 32-bit 20
installation directory
AIX 32-bit 4
AIX 64-bit 8
HP-UX 32-bit 12
HP-UX 64-bit 16
Solaris 32-bit 20
installation procedure
AIX 32-bit 4
AIX 64-bit 8

installation procedure *(continued)*
HP-UX 32-bit 12
HP-UX 64-bit 16
Solaris 32-bit 20

M

management class 25

N

node name
registering 26

O

ON-Bar
configuring 29
errors 31
object naming
database backup 25
log backup 25
TSM compatibility 30
use of 1
onconfig 26, 31
editing 29
Informix IDS 7 29
onconfig.std 29
oninit 30
online.log 31
option files
dsm.opt 6, 10, 14, 18, 22, 24, 26
dsm.opt.smp 24
dsm.sys 6, 10, 14, 18, 22, 24
dsm.sys.smp 24
include-exclude 25
options
COMMMETHOD 24
INCLUDE 25
options *(continued)*
PASSWORDACCESS 24
SERVERNAME 24
TCPSERVERADDRESS 24
TRACEFILE 24
TRACEFLAG 24

P

password
initializing 26
registering 26
PASSWORDACCESS option 24
problem determination 31
profile
AIX 32-bit 6
AIX 64-bit 10
HP-UX 32-bit 14
HP-UX 64-bit 18
Solaris 32-bit 22
programs
ON-Bar 1, 29, 31
oninit 30
tdpipswd 26

R

README.INF
AIX 32-bit 4
AIX 64-bit 8
HP-UX 32-bit 12
HP-UX 64-bit 16
Solaris 32-bit 20
return codes 31

S

SERVERNAME option 24
sm_versions 30
sm_versions.std 30
software requirements
  AIX 32-bit 4
  AIX 64-bit 8
  HP-UX 32-bit 12
  HP-UX 64-bit 16
  Solaris 32-bit 20
Solaris 32-bit 20
  environment variables 22
  hardware requirements 20
  installation directory 20
  installation procedure 20
  operating systems 20
  package 20
  software requirements 20
  uninstalling 23

T

TCPSERVERADDRESS option 24
tdpipswd 26
TRACEFILE option 24
TRACEFLAG option 24
TSM
  node name 26
  ON-Bar compatibility 30
  password 26
  registering 26
tsmlic.log 31

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